Form PTO-1449 Modified

Docket No. ISIS-4723

 -IVE

Cited by Applicant
(Use several sheets if necessary)

OCI 1 2 2001

Applicant

Muthiah Manoharan, et al.

290

U.S. Department of Commerce Patent and Trademark Office

Filing Date
March 30, 2001

Group

1623-1635

U. S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
0/	AM	4,415,732	11/15/83	Caruthers et al.	536	27
1	AN	4,458,066	07/03/84	Caruthers et al.	536	27
	AO	4,500,707	02/19/85	Caruthers et al.	536	27
	AP	4,668,777	05/26/89	Caruthers et al.	536	27
	AQ	4,725,677	02/16/88	Köster et al.	536	27
	AR	4,973,679	11/27/90	Caruthers et al.	536	27
	AS	5,132,418	07/21/92	Caruthers et al.	536	27
	AT	5,149,798	09/22/92	Agrawal et al.	536	27
	AU	5,210,264	05/11/93	Yau	558	167
	AV	6,121,437	09/19/00	Guzaev, et al.	536	26.1
N	AW	RE 34,069	09/15/92	Koster, et al.	536	27
1						

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation YES NO	
al.	AX	WO 96/39413	12/12/96	PCT		
)4.						
TIXZ A B STRUCK						

EXAMINER

DATE CONSIDERED

				Smeet 1 or 3
	Form	PTO-1449 Modified	Docket No. ISIS-4723	Serial No. 65 20 09/823,031 09/823
OCT 1 2 2001		f Patent and Publications Cited by Applicant everal sheets if necessary)	Applicant Muthiah Manohara	nn, et al.
PADEMARK	,	Department of Commerce at and Trademark Office	Filing Date March 30,2001	Group 1623-1635
	ОТНЕ	ER DOCUMENTS (Including Author	r, Title, Date, Pertine	nt Pages, Etc.)
*	AA	Agrawal, S., "Protocols for oligonucl Totowa, NJ.	leotides and analogs",	1993, Human Press,
	AB	Bannwarth, W., "Synthesis of Oligod Method Using Dimer Units and Diffe Chim. Acta, 1985, 68, 1907-1913		
	AC	Beaucage, S. L. et al., "Deoxynucleon Intermediates for Deoxypolynucleotic 1859-1862	-	
	AD	Beaucage, S. L. et al., "Advances in the Phosphoramidite Approach," <i>Tetrahe</i>		
	AE	Iyer, R. P., "Solid-Phase Stereoselect Phosphorothioates: The Nucleoside I Synthons," <i>Tetrahedron Letts.</i> , 1998,	Bicyclic Oxazaphospho	
	AF	Khorana, H. G. et al., "Studies on Po Gene for an Alanine Transfer Ribonu 209-217	-	**
	AG	Kumar, G. et al., "Improvements in C N,N-Dialkylphosphoramidite Dimer Methodology," J. Org. Chem., 1984,	Units for Solid Suppor	- · · · · · · · · · · · · · · · · · · ·
	AH	Miura, K. et al., "Blockwise Mechan Phosphoramidite Method," Chem Ph	-	•
	AI	Reese, C. B. et al., "The Chemical Sy Phosphotriester Approach," <i>Tetrahea</i>	_	•
R	AJ	Wilk, A. et al., "N-Trifluoroacetylam Groups in the Synthesis of Oligodeon 6712-6713		
EXAMINI	ER	Wint I lott to	DATE CONSIDER	ED 2-9-03
* 4	C 41	/c 11 1/ // / 1 1 1	TT C D 1	1.000

^{*} A copy of these references will not be forwarded to the U.S. Patent and Trademark Office since they are believed to be too voluminous and easily obtainable by the Examiner.

	Form	PTO-1449 Modified	Docket No. ISIS-4723		<u> დ</u> CT 1 7
OIPE		f Patent and Publications Cited by Applicant everal sheets if necessary)	Applicant Muthiah Manoha	Serial No. 09/823,031	2001
T 1 2 2001		Department of Commerce nt and Trademark Office	Filing Date March 30,2001	Group 1623 /635	
RADEMAN	ОТН	ER DOCUMENTS (Including A	uthor, Title, Date, Pertir	nent Pages, Etc.)	
De	AK	Wolter, A. et al., "Polymer Supp Henhectacosa Deoxynucleotide Nucleotides, 1986, 5, 65-77			
					
H	AL	Zioudrou, C. et al., "The Particip Phosphoric Acid Esters. I. Phos 1963, 82, 3258-3264	pation of the Amide Grouphotriesters in Alkaline N	p in the Solvolysis of Media," J. Amer. Chem. S	Soc.
H	AL	Zioudrou, C. et al., "The Particip Phosphoric Acid Esters. I. Phos	pation of the Amide Grouphotriesters in Alkaline N	p in the Solvolysis of Media," J. Amer. Chem. S	Soc.
H	AL	Zioudrou, C. et al., "The Particip Phosphoric Acid Esters. I. Phos	pation of the Amide Grouphotriesters in Alkaline N	p in the Solvolysis of Media," J. Amer. Chem. S	
H	AL	Zioudrou, C. et al., "The Particip Phosphoric Acid Esters. I. Phos	pation of the Amide Grouphotriesters in Alkaline N	p in the Solvolysis of Media," J. Amer. Chem. S	
H	AL	Zioudrou, C. et al., "The Particip Phosphoric Acid Esters. I. Phos	pation of the Amide Grouphotriesters in Alkaline N	p in the Solvolysis of Media," J. Amer. Chem. S	Soc.